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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,466	12/06/2004	Shaily Verma	PU020268	1346

7590
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02/09/2007

EXAMINER

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/517,466

Applicant(s)

VERMA ET AL.

Examiner

SIMON D. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Griswold et al. (2003/0156566).

Regarding claims 1 and 14, Griswold discloses an interface for connecting networks (abstract), comprising: an interworking function provided between a WLAN and a PLMN (220 of fig.2-3); wherein the interworking function comprising a dual-protocol stack (320 and 330 of fig.3) which interfaces the WLAN protocols and PLMN protocols (figs.2-4, paragraphs 19-32) to have more available bandwidths (claim 13).

3. Claims 1-8, 10-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Katz et al. (2006/0291455).

Regarding claim 1, Katz discloses an interface for connecting networks (abstract), comprising: an interworking function provided between a WLAN and a PLMN (figs.8-11, paragraph 304), wherein the interworking function comprising a dual-protocol

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stack (WLAN protocol and PLMN protocol stack together) which interfaces the WLAN protocols and PLMN protocols (figs. 8-11, 13-16, paragraphs 320-326) to have more available bandwidths (paragraph 298, 304).

Regarding claim 2, Katz further discloses wherein the interworking function (relay including WAN protocol and PLMN protocol is within WLAN as the interworking function) present within the WLAN (figs. 8-11).

Regarding claim 3, Katz further discloses wherein the PLMN includes one of a UMTS or GPRS system (paragraphs 31, 631).

Regarding claim 4, Katz further discloses wherein the interworking function communicates between the WLAN and the PLMN through a Gn interface (figs. 8-11, 13-16, paragraphs 268, 278, 280, 284-289).

Regarding claim 5, Katz further discloses wherein the seamless communications include protocol compatibility between the WLAN and the PLMN (figs.8-11, 13-16).

Regarding claim 6, Katz further discloses wherein the interworking function functions as a logical serving general packet radio service (GPRS) support node (SGSN) (figs. 10,12-14).

Regarding claim 7, Katz further discloses wherein the interworking function is viewed by the PLMN as a logical SGSN within its own network (figs. 8,10, 12-14).

Regarding claim 8, Katz further discloses wherein the interworking function is viewed as a node within the WLAN by the WLAN when receiving information from the PLMN (figs.8-11, 13-16).

Regarding claims 10-11, Katz further discloses protocol plane for user and for control (figs.8-9, paragraphs 285,288, 289).

Regarding claim 12, Katz further discloses wherein the PLMN includes SM/GMM (session management (SM)/GPRS mobility management (GMM)) procedures, which are reused in the WLAN due to the use of an adaptation layer in a mobile dual-protocol stack and in the IWF to WLAN interface to mimic the functionality of an RRC (radio resource control) protocol sublayer (figs.8-16, paragraphs 76-80, 205, 307, 318, 325, 197-204, 248).

Regarding claim 13, Katz further disclose wherein the WLAN works with any serving general packet radio service (GPRS) or code division multiple access (CDMA) system (paragraphs 365, 631, 635).

Regarding claim 14, this claim is rejected for the same reason as set forth in claims 1, 3, 9.

Regarding claims 15-18, Katz further discloses wherein the interworking function communicates with a serving general packet radio service (GPRS) support node (SGSN) of the UMTS network through a Gn interface, seamless interactions by ensuring protocol compatibility ((figs. 8-11, 13-16, paragraphs 268, 278, 280, 284-289),

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 18, Katz further discloses the step of viewing the interworking function as a logical SGSN from a same PLMN (figs.8-11, 13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katz et al. (2006/0291455) in view of Lundin (2004/0037269).

Regarding claim 9, Katz further discloses wherein the interworking function is coupled to a gateway general packet radio service (GPRS) support node (GGSN) via a tunnel (paragraphs 291, 333, 518). However, Katz fails to teach the tunnel is GTP tunnel.

Lundin, in the same field of invention, discloses a GPRS support node via a GTP tunnel (paragraphs 65, 68, 134, 137). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Katz, modified by Lundin in order to improve the packet transmission.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

600 Dulany, Alexandria, VA 22314

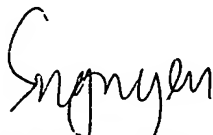
Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Hand-delivered response should be brought to Customer Service Window located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Simon Nguyen

January 25, 2007



SIMON NGUYEN
PRIMARY EXAMINER